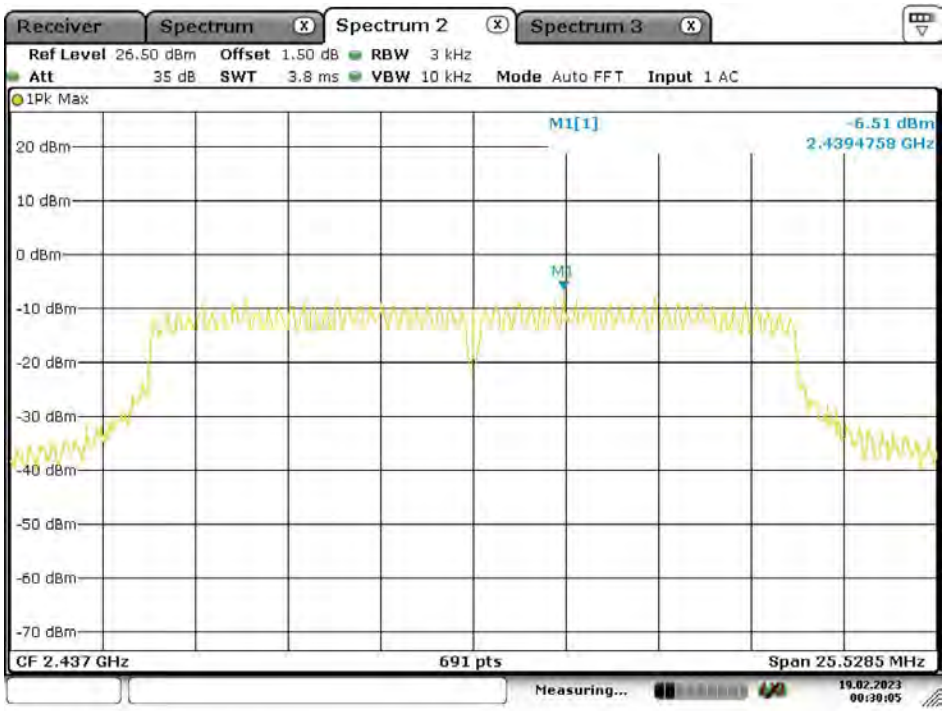
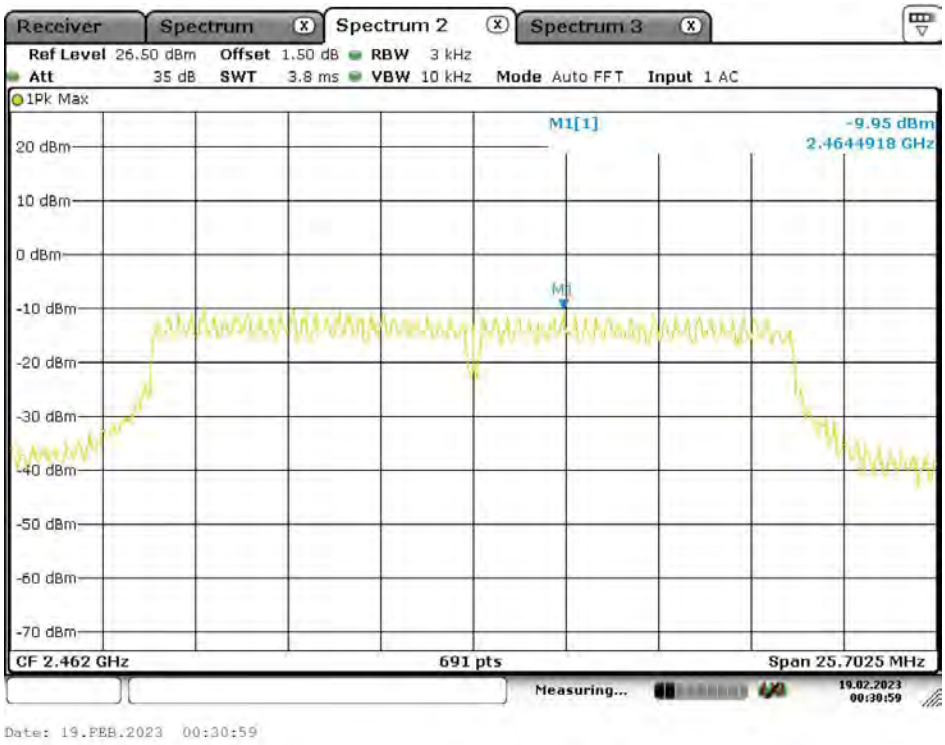


11N20_Ant0_2462



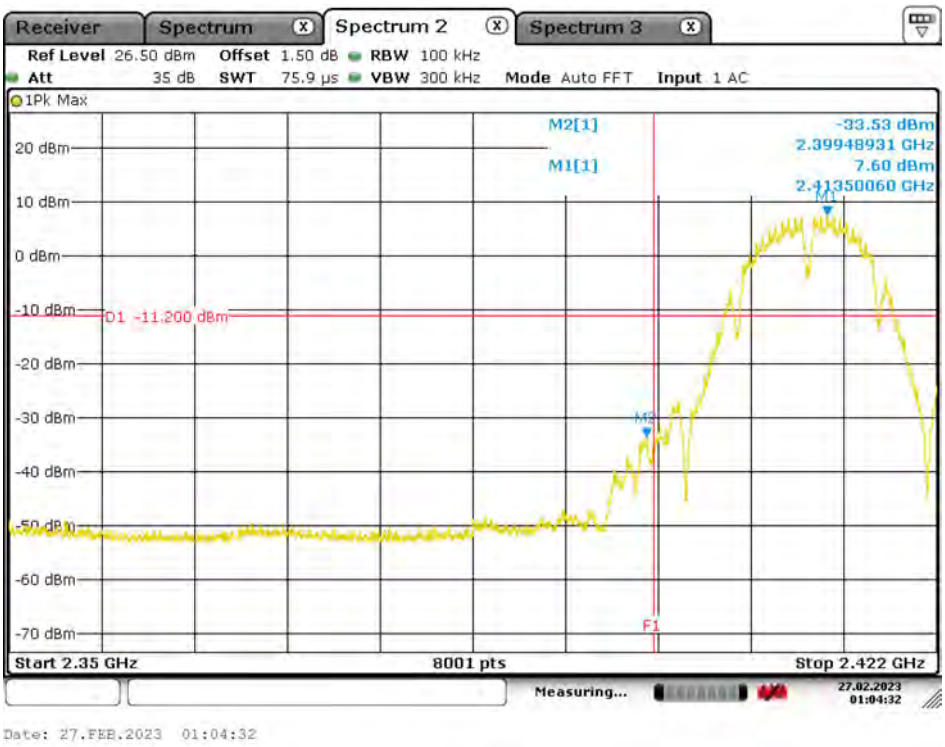
BAND EDGE MEASUREMENTS

TEST RESULT

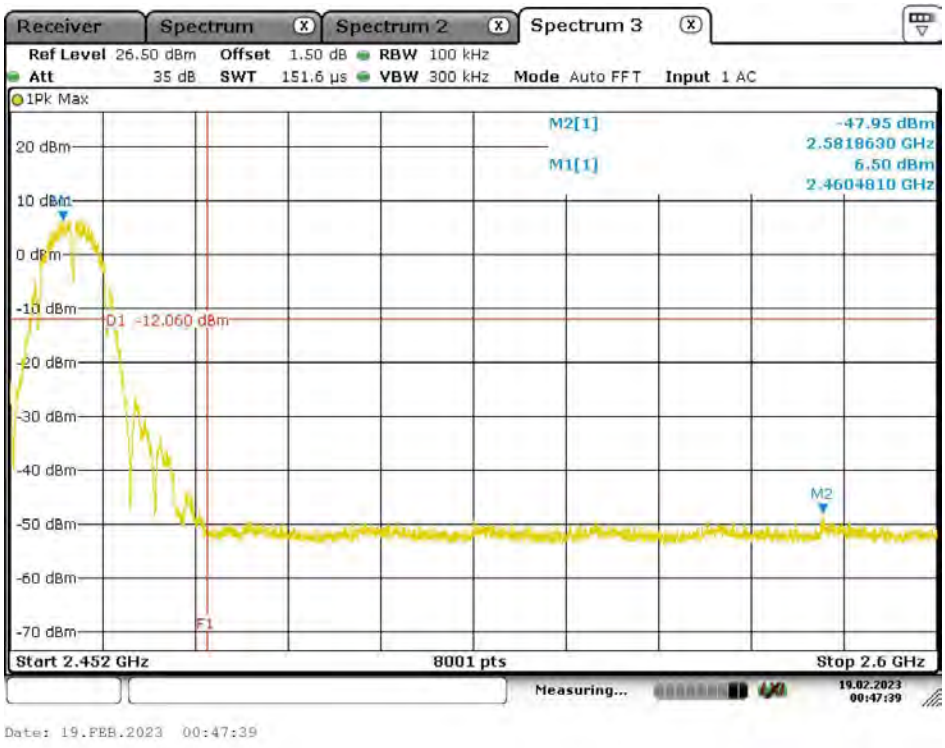
TestMode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant0	Low	2412	8.80	-33.53	≤-11.20	PASS
	Ant0	High	2462	7.94	-47.95	≤-12.06	PASS
11G	Ant0	Low	2412	5.58	-26.38	≤-14.42	PASS
	Ant0	High	2462	4.70	-48.77	≤-15.30	PASS
11N20	Ant0	Low	2412	6.31	-23.46	≤-13.69	PASS
	Ant0	High	2462	5.37	-48.83	≤-14.63	PASS

TEST GRAPHS

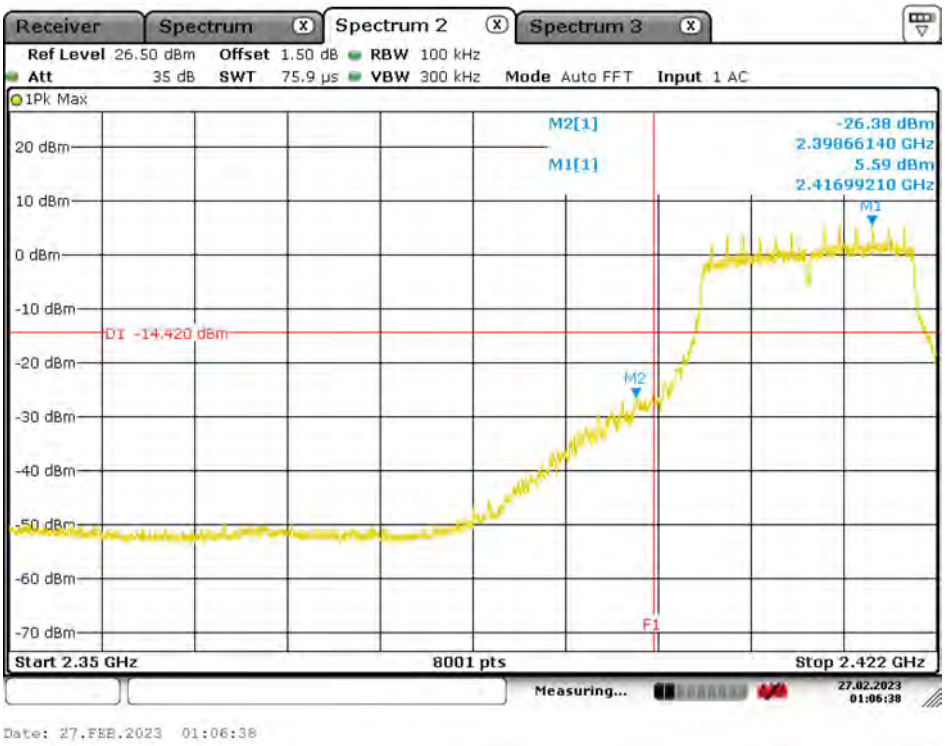
11B _Ant0_Low_2412



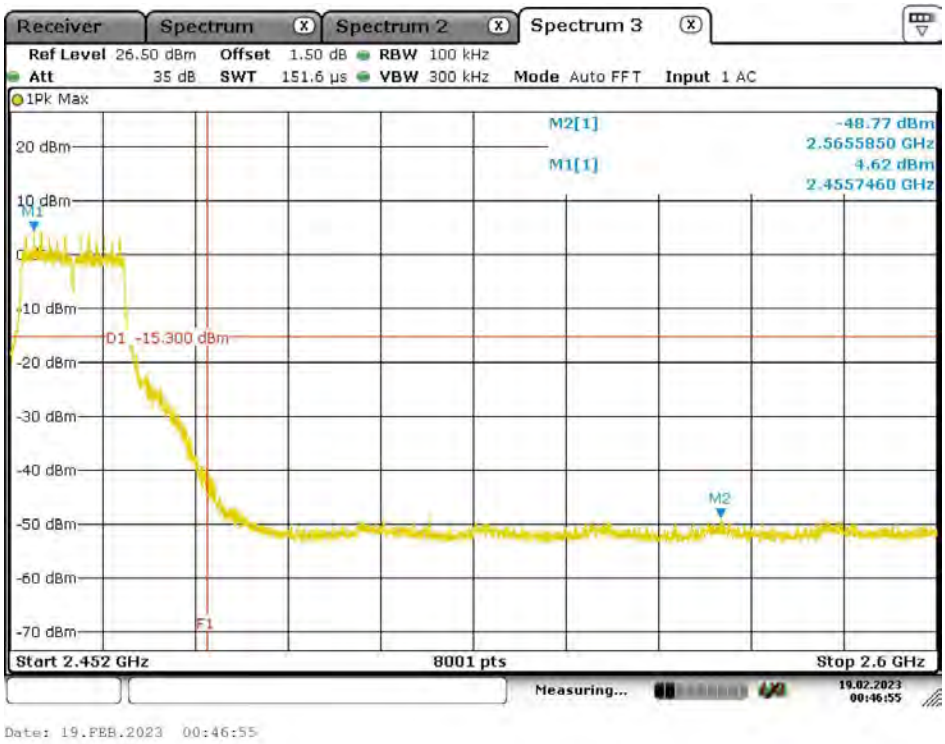
11B _Ant0_High_2462



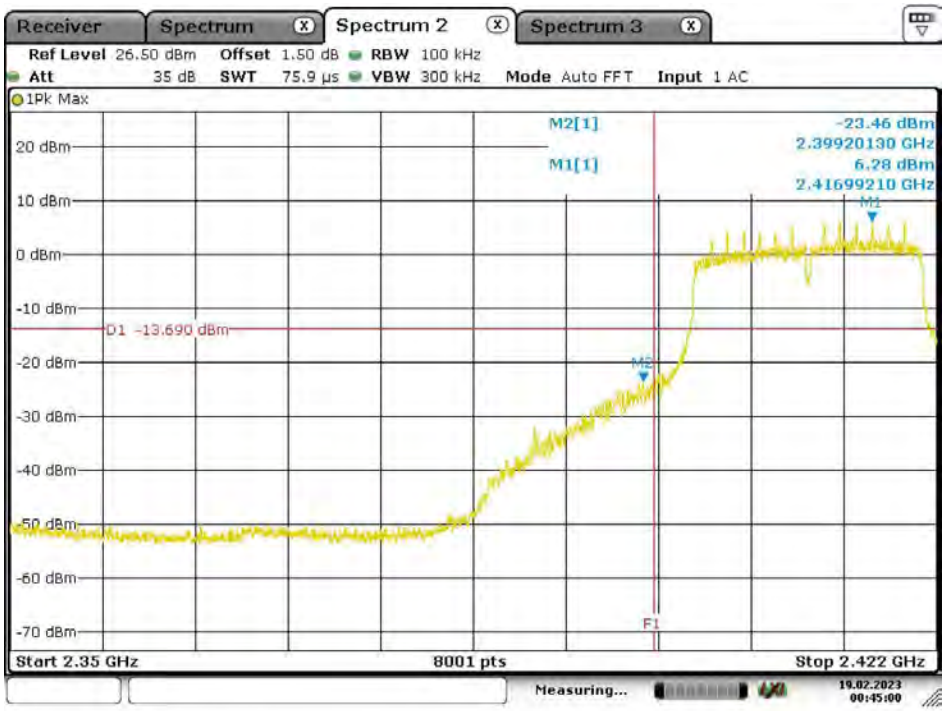
11G _Ant0_Low_2412



11G _Ant0_High_2462

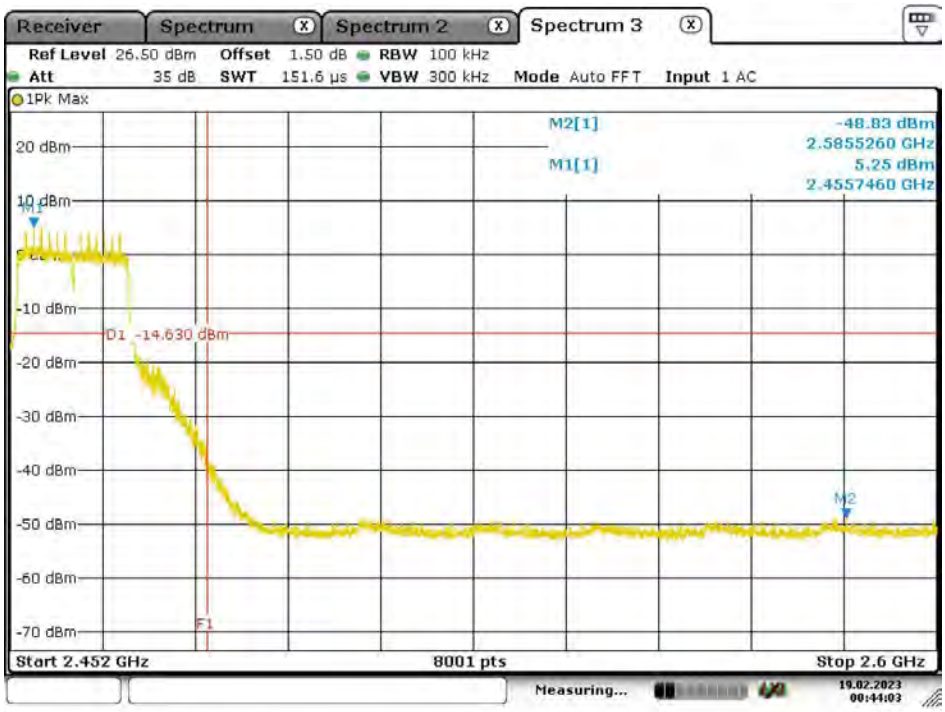


11N20_Ant0_Low_2412



Date: 19.FEB.2023 00:45:00

11N20_Ant0_High_2462



Date: 19.FEB.2023 00:44:02

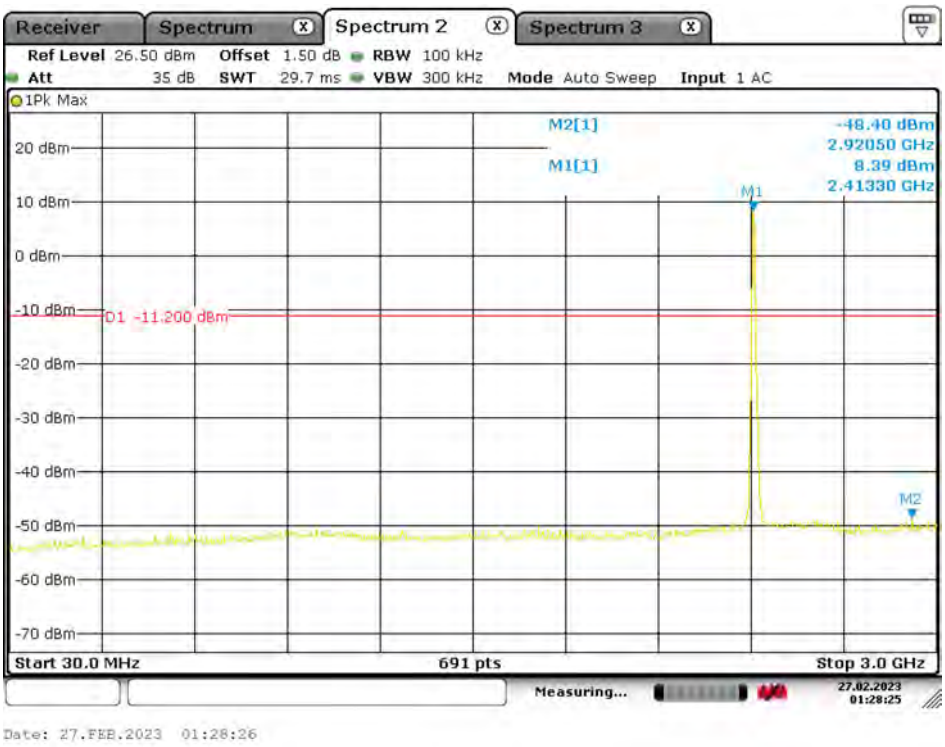
CONDUCTED SPURIOUS EMISSION

TEST RESULT

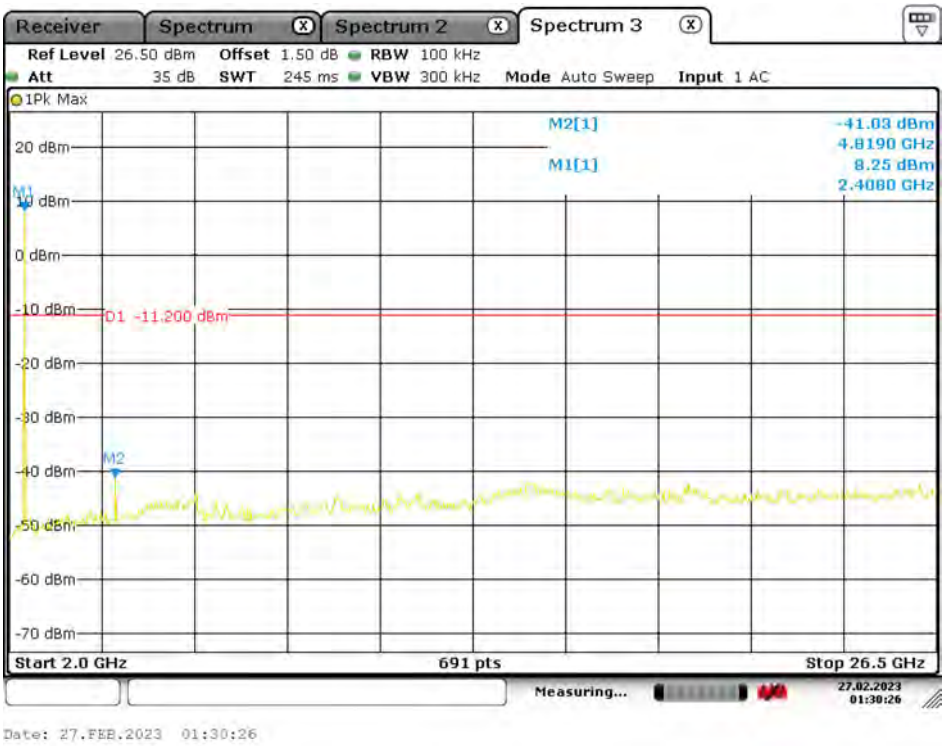
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant0	2412	30~3000	8.80	-48.40	≤-11.20	PASS
			2000~26500	8.80	-41.03	≤-11.20	PASS
	Ant0	2437	30~3000	9.32	-48.99	≤-10.68	PASS
			2000~26500	9.32	-41.90	≤-10.68	PASS
	Ant0	2462	30~3000	7.94	-48.57	≤-12.06	PASS
			2000~26500	7.94	-41.79	≤-12.06	PASS
11G	Ant0	2412	30~3000	5.58	-48.38	≤-14.42	PASS
			2000~26500	5.58	-41.59	≤-14.42	PASS
	Ant0	2437	30~3000	6.61	-49.02	≤-13.39	PASS
			2000~26500	6.61	-41.53	≤-13.39	PASS
	Ant0	2462	30~3000	4.70	-48.97	≤-15.30	PASS
			2000~26500	4.70	-42.11	≤-15.30	PASS
11N20	Ant0	2412	30~3000	6.31	-48.43	≤-13.69	PASS
			2000~26500	6.31	-42.07	≤-13.69	PASS
	Ant0	2437	30~3000	7.15	-49.09	≤-12.85	PASS
			2000~26500	7.15	-42.12	≤-12.85	PASS
	Ant0	2462	30~3000	5.37	-48.97	≤-14.63	PASS
			2000~26500	5.37	-42.06	≤-14.63	PASS

TEST GRAPHS

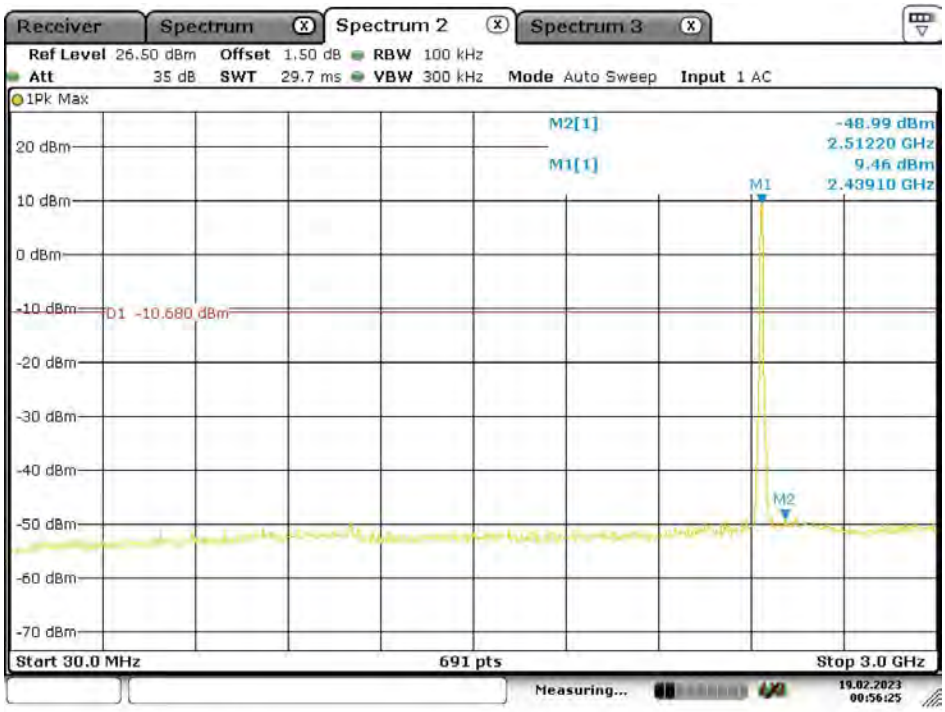
11B _Ant0_2412_30~3000



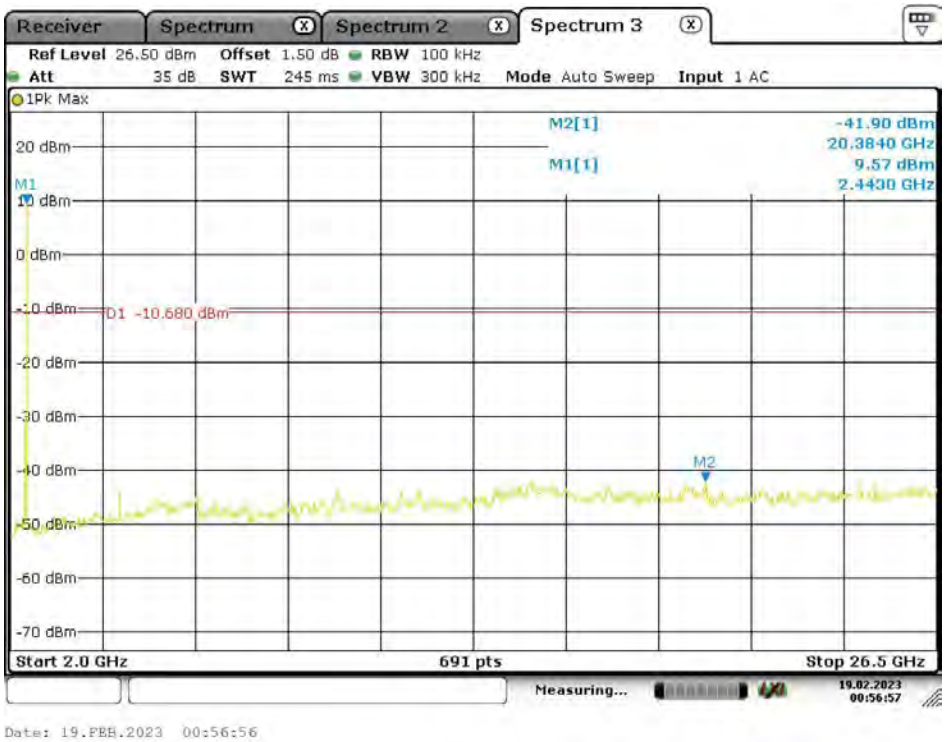
11B_Ant0_2412_2000~26500



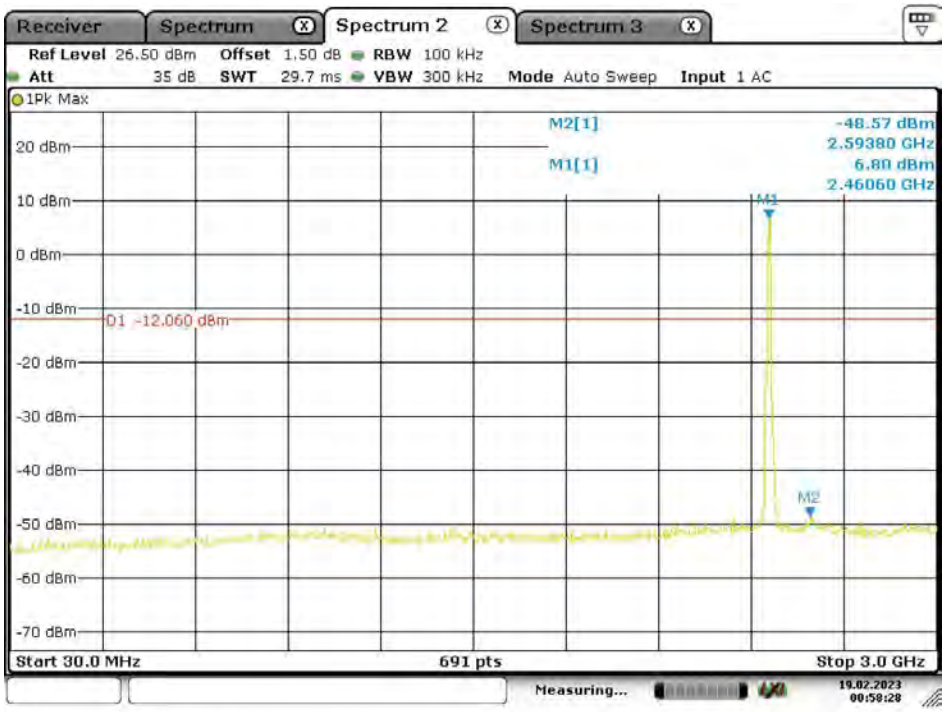
11B_Ant0_2437_30~3000



11B_Ant0_2437_2000~26500

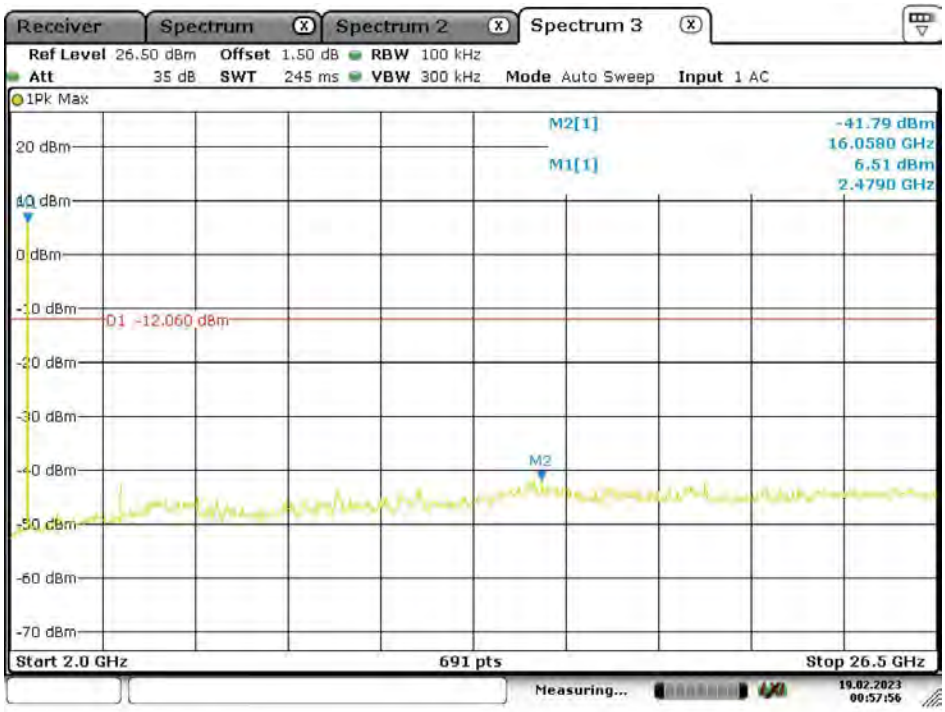


11B_Ant0_2462_30~3000



Date: 19.FEB.2023 00:58:27

11B_Ant0_2462_2000~26500



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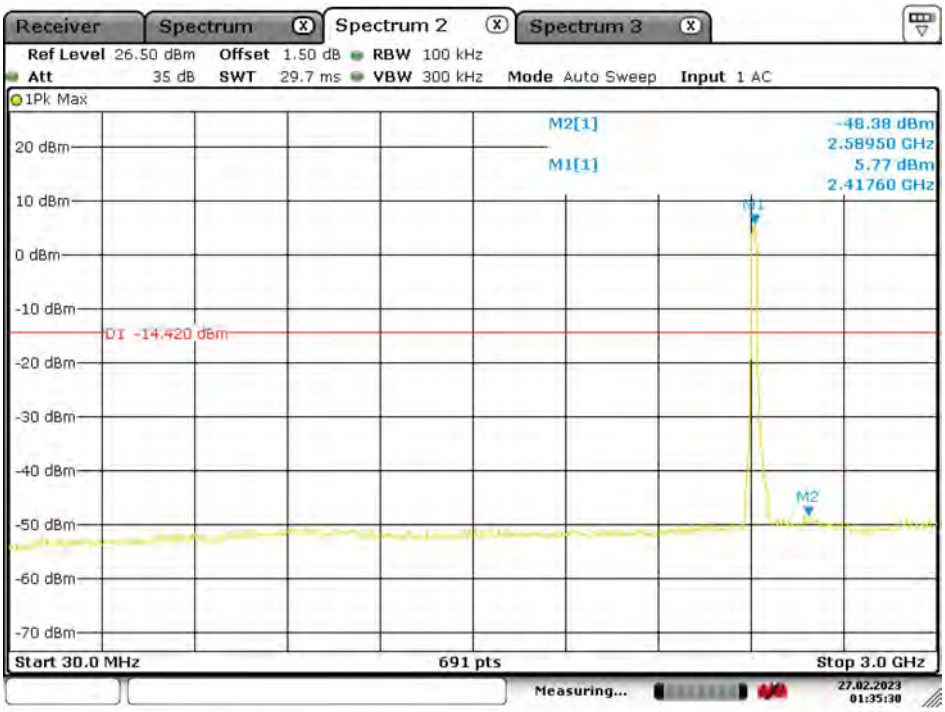
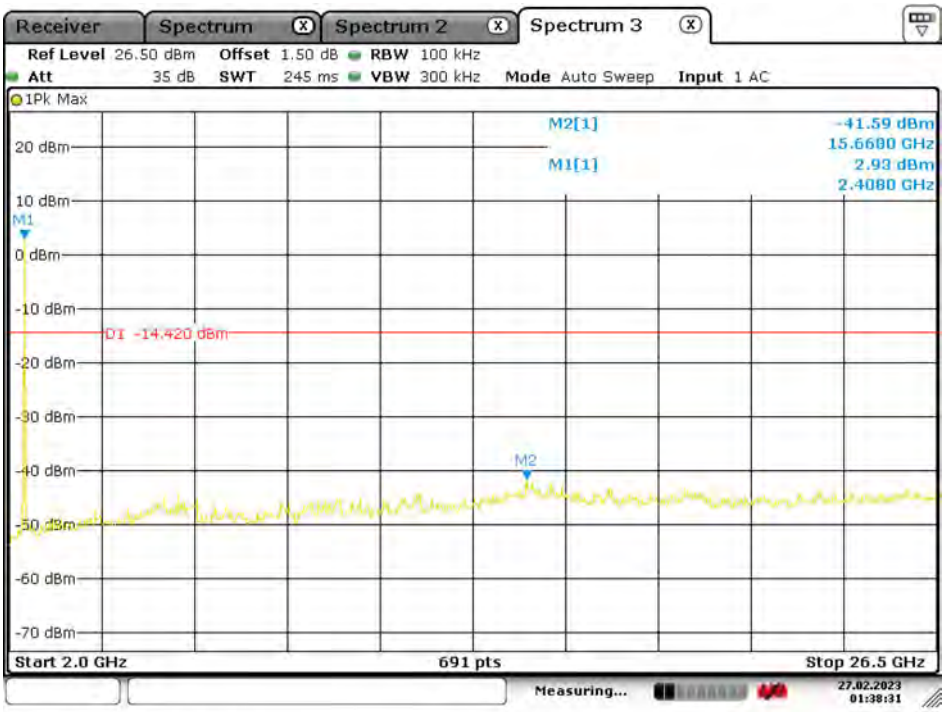
11G_Ant0_2412_30~3000



Date: 27.FEB.2023 01:35:30

11G_Ant0_2412_2000~26500



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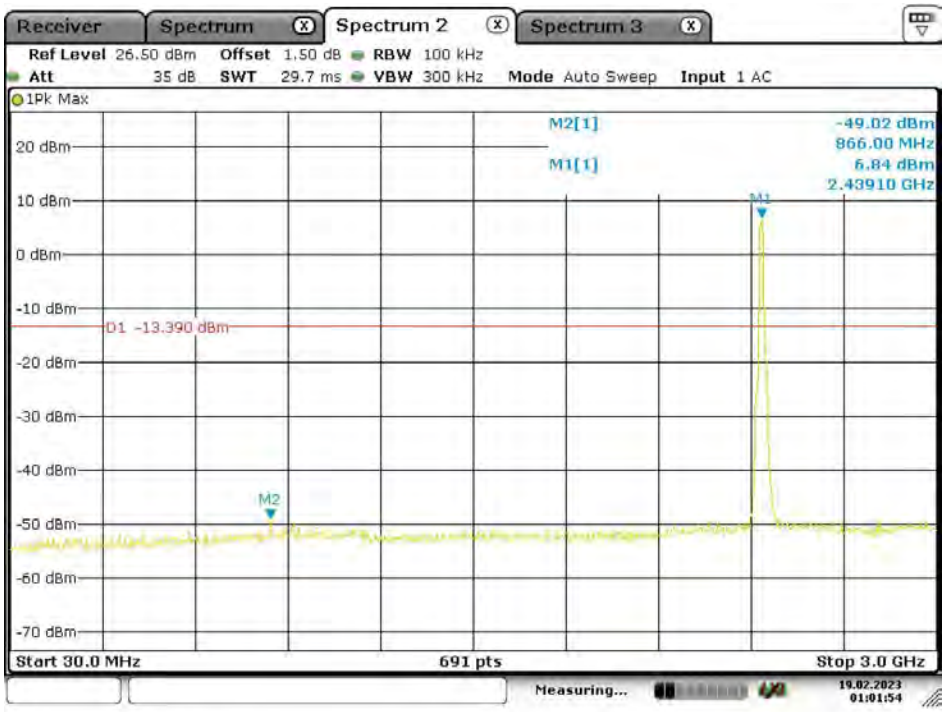
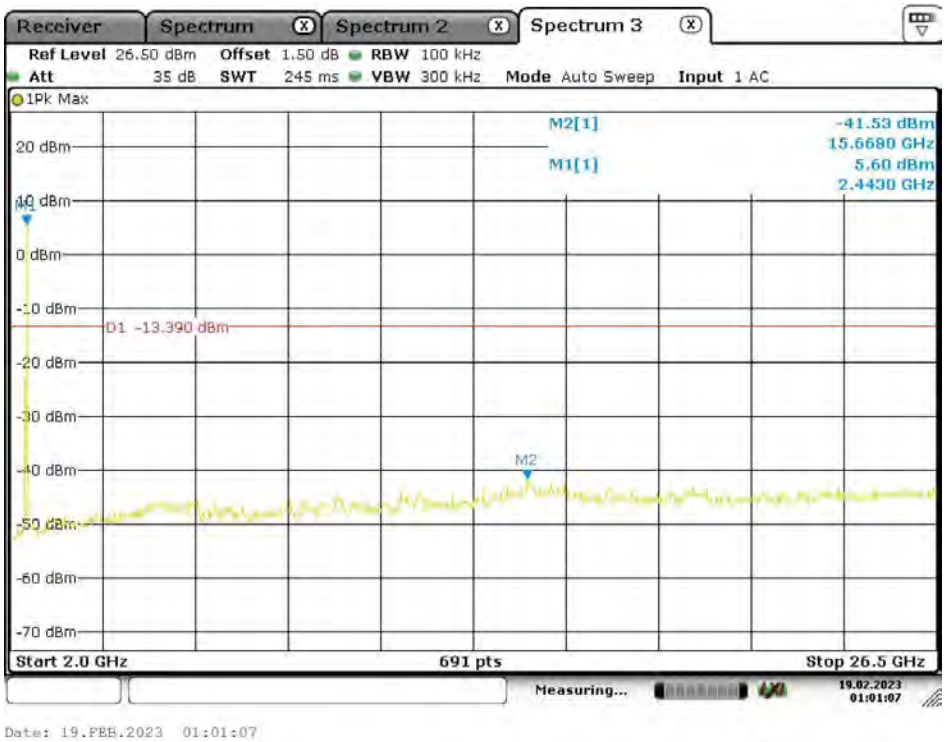
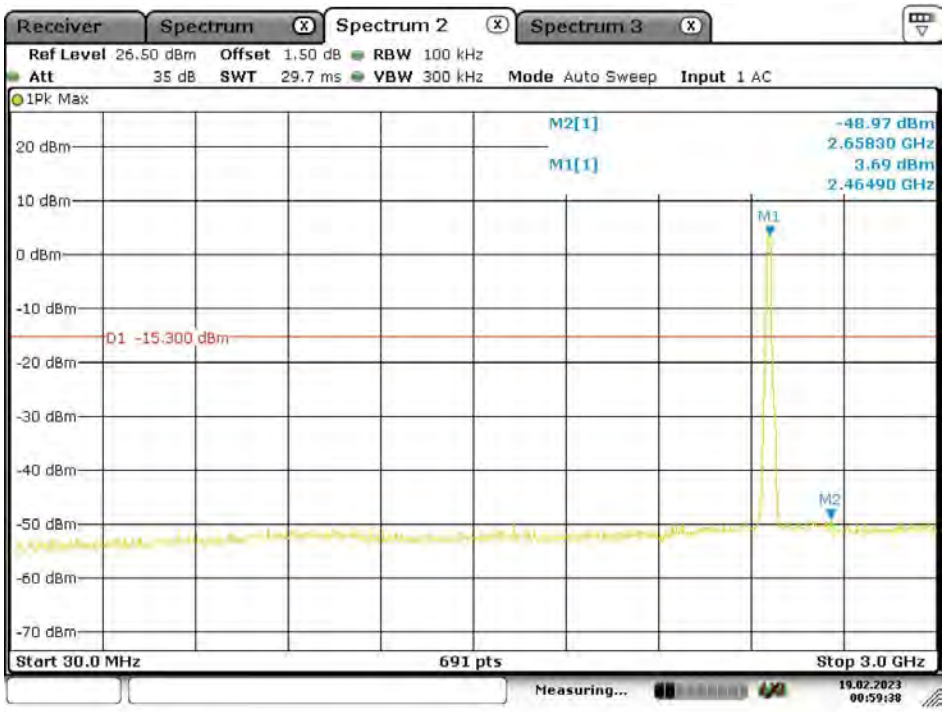
11G_Ant0_2437_30~3000



11G_Ant0_2437_2000~26500

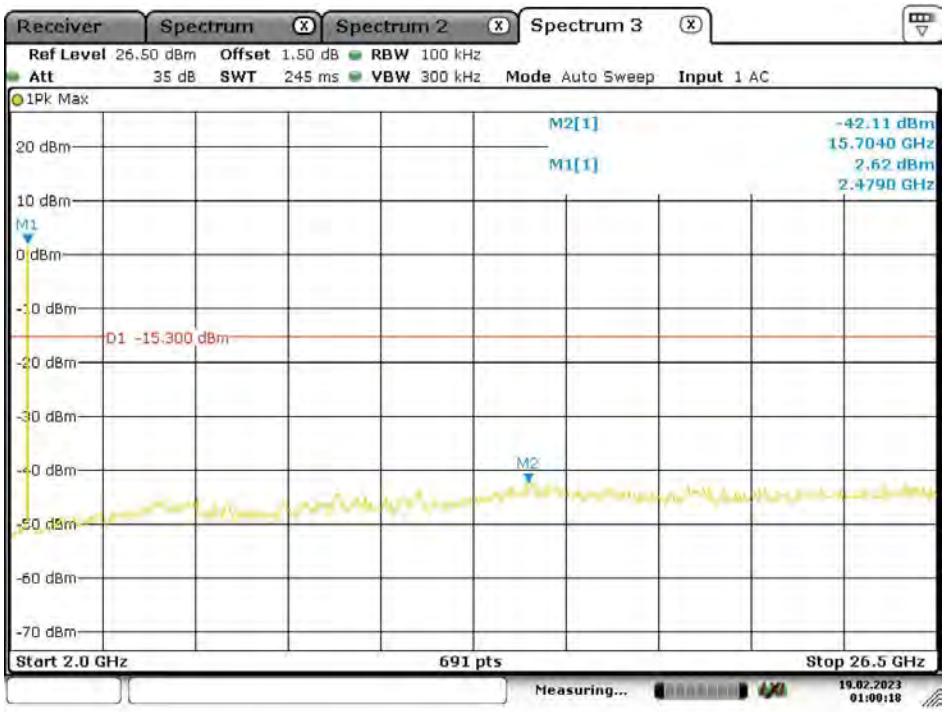


11G_Ant0_2462_30~3000



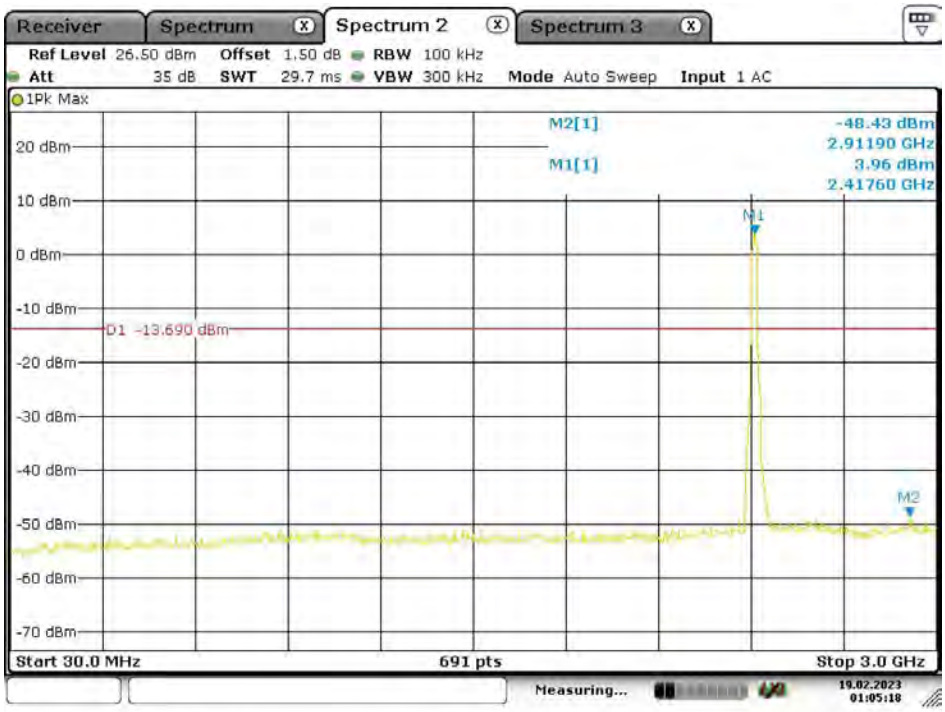
Date: 19.FEB.2023 00:59:37

11G_Ant0_2462_2000~26500

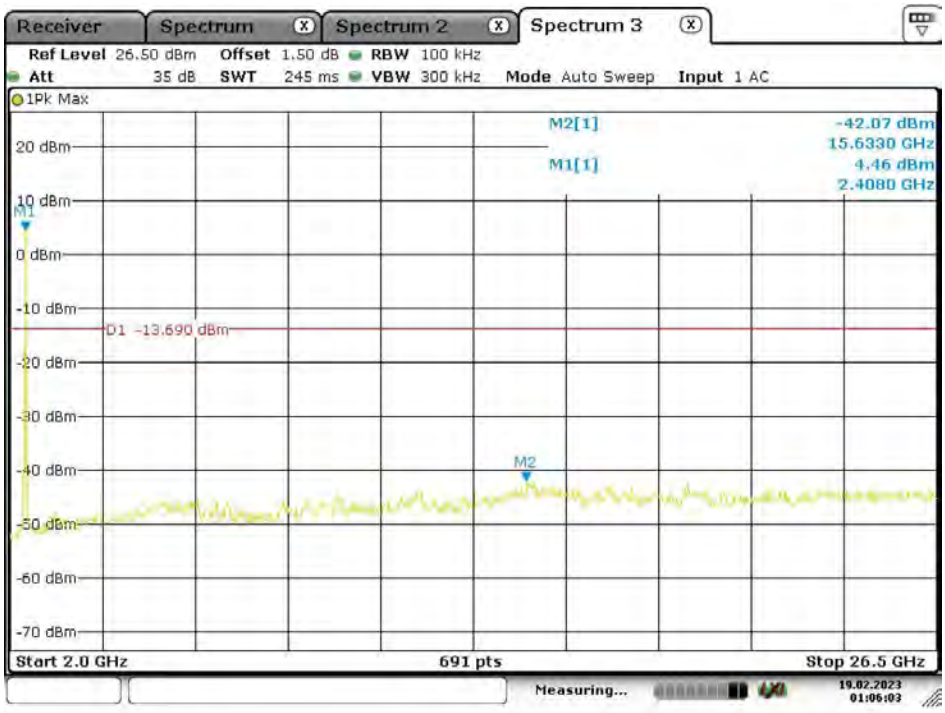


Date: 19.FEB.2023 01:00:18

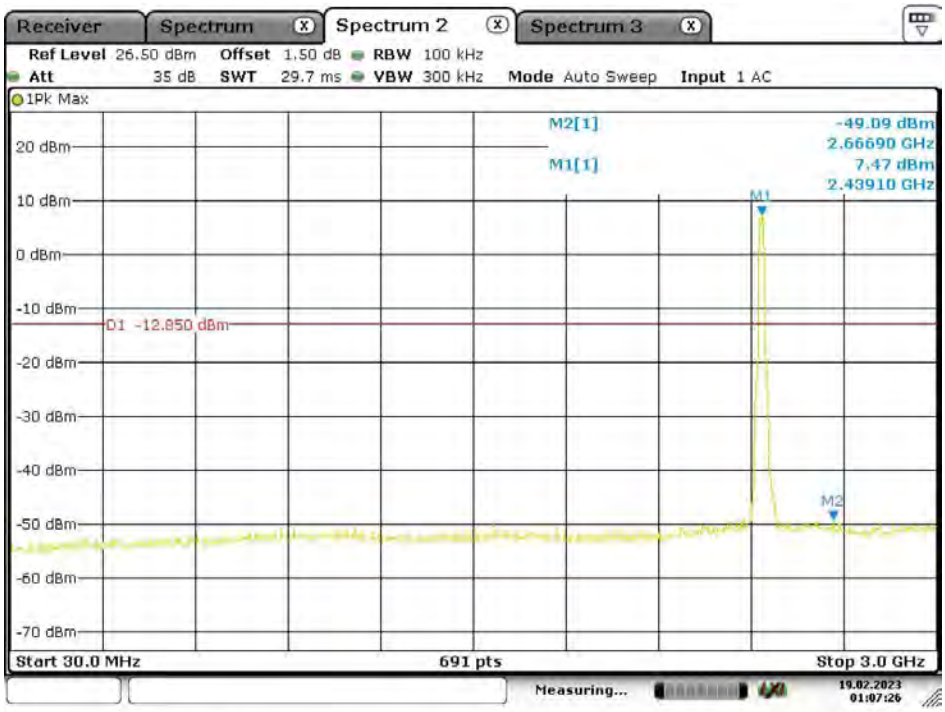
11N20_Ant0_2412_30~3000



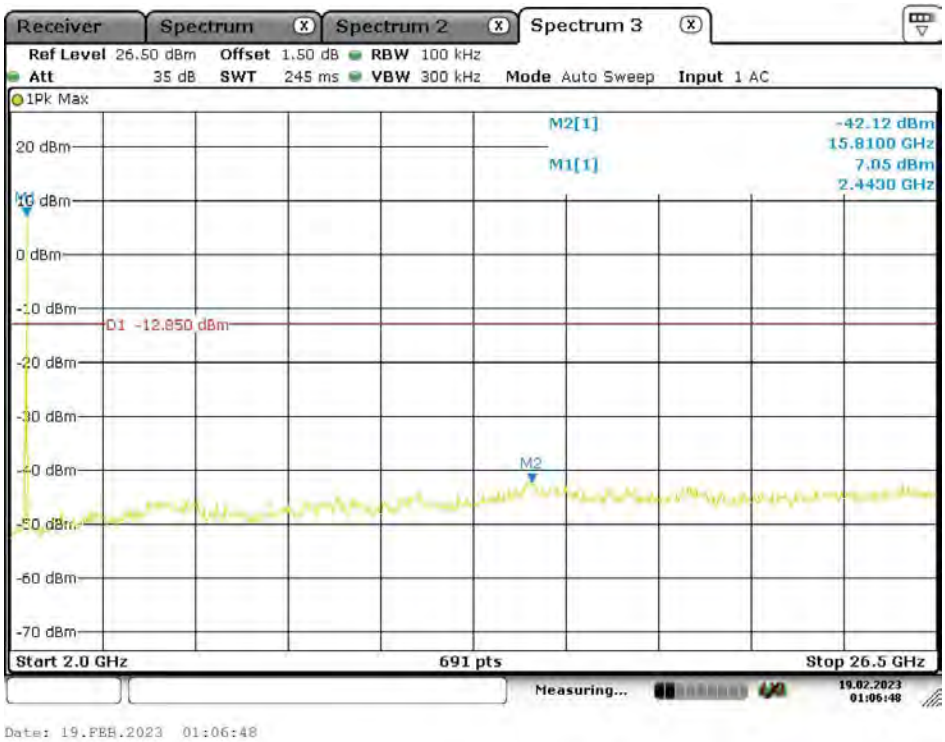
11N20_Ant0_2412_2000~26500



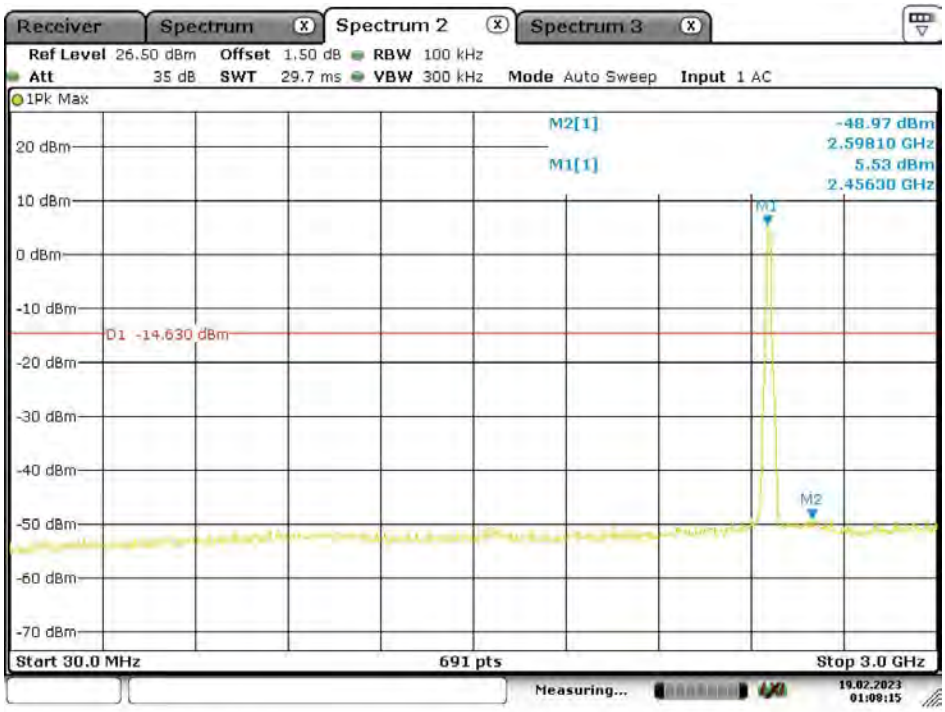
11N20_Ant0_2437_30~3000



11N20_Ant0_2437_2000~26500

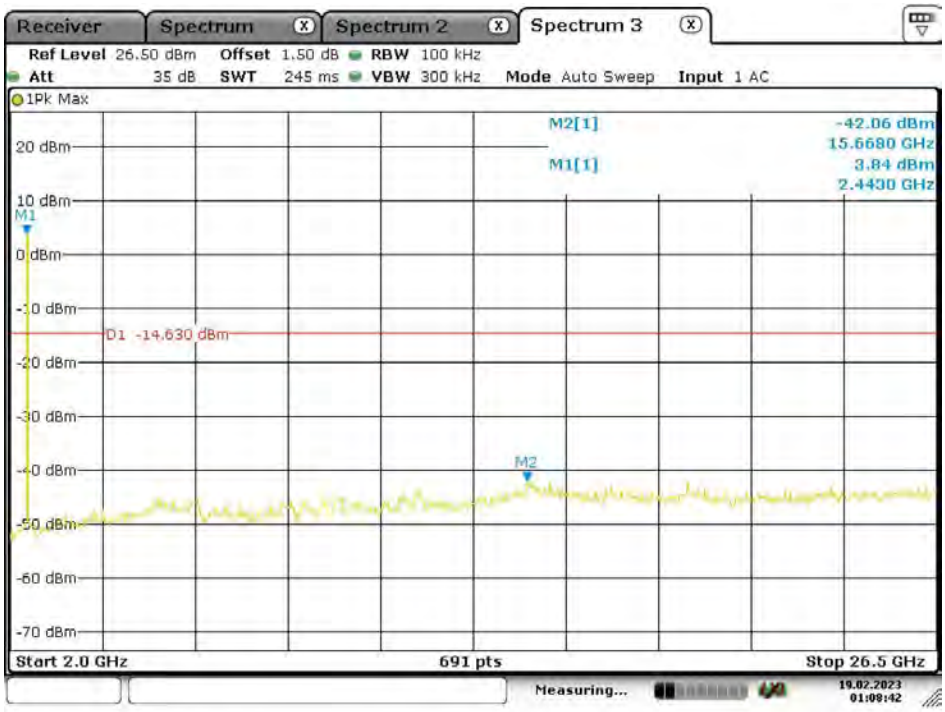


11N20_Ant0_2462_30~3000



Date: 19.FEB.2023 01:08:15

11N20_Ant0_2462_2000~26500



Date: 19.FEB.2023 01:08:42

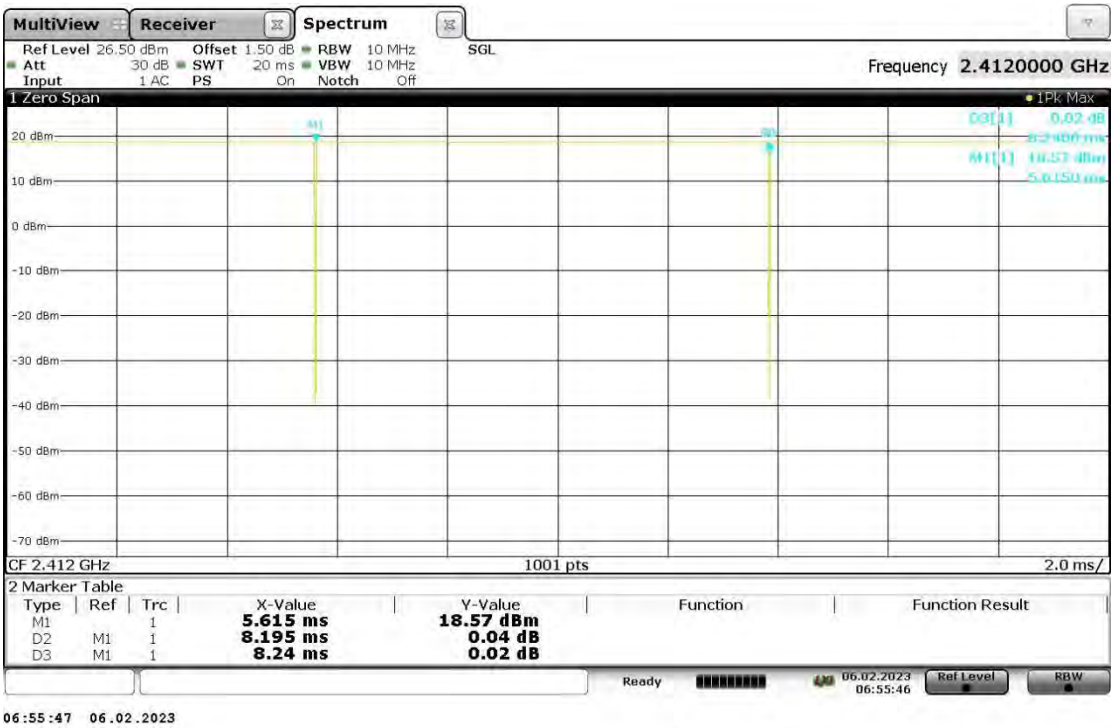
DUTY CYCLE

TEST RESULT

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11B	Ant0	2412	8.195	8.240	99.45
11G	Ant0	2412	1.360	1.405	96.8
11N20	Ant0	2412	1.275	1.305	97.70

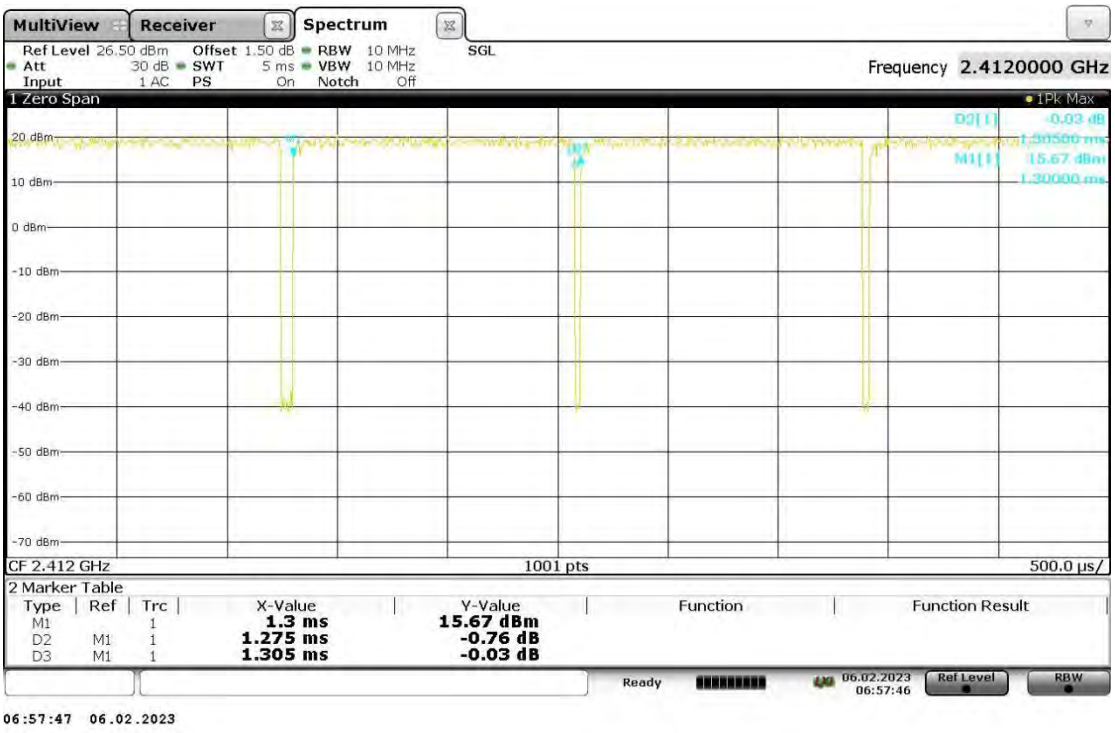
TEST GRAPHS

11B_Ant0_2412



11G_Ant0_2412

11N20_Ant0_2412


MultiView
Receiver
Spectrum
Ref Level 26.50 dBm Offset 1.50 dB RBW 10 MHz
Att 30 dB SWT 5 ms VBW 10 MHz
Input 1 AC PS On Notch Off
SGL
Frequency 2.4120000 GHz
1 Zero Span
1Pk Max
D2[1] -0.03 dB
1.30500 ms
M1[1] 15.67 dBm
1.30000 ms
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
CF 2.412 GHz
1001 pts
500.0 µs/
2 Marker Table
Type Ref Trc X-Value Y-Value Function Function Result
M1 1 1.3 ms 15.67 dBm
D2 M1 1 1.275 ms -0.76 dB
D3 M1 1 1.305 ms -0.03 dB
Ready
06.02.2023 06:57:46
Ref Level
RBW
06:57:47 06.02.2023

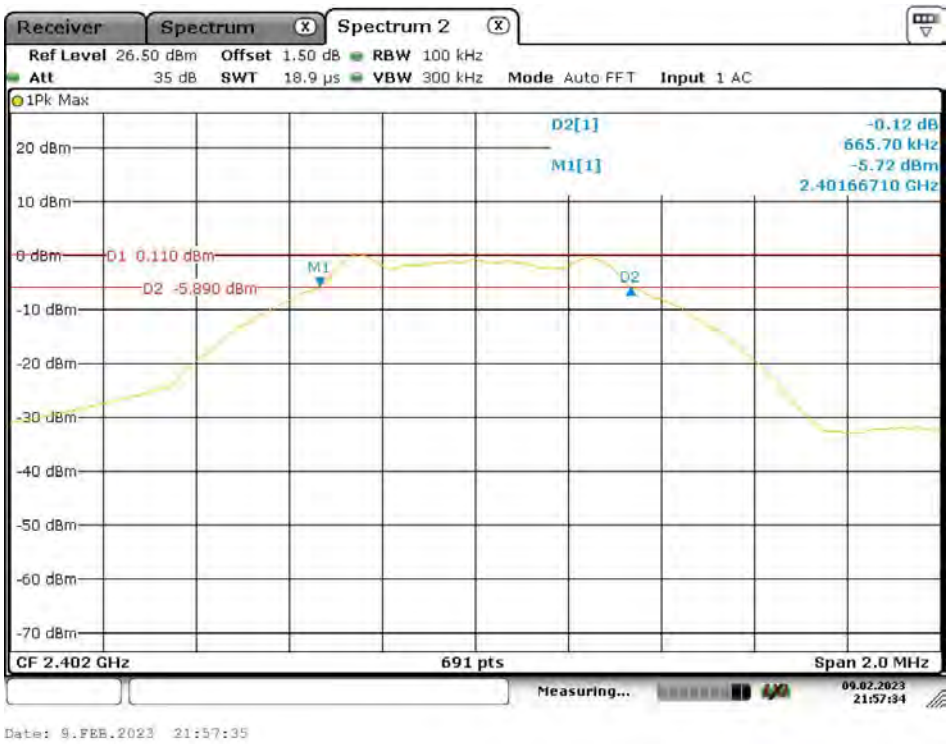
7 Appendix 2 BLE

DTS BANDWIDTH

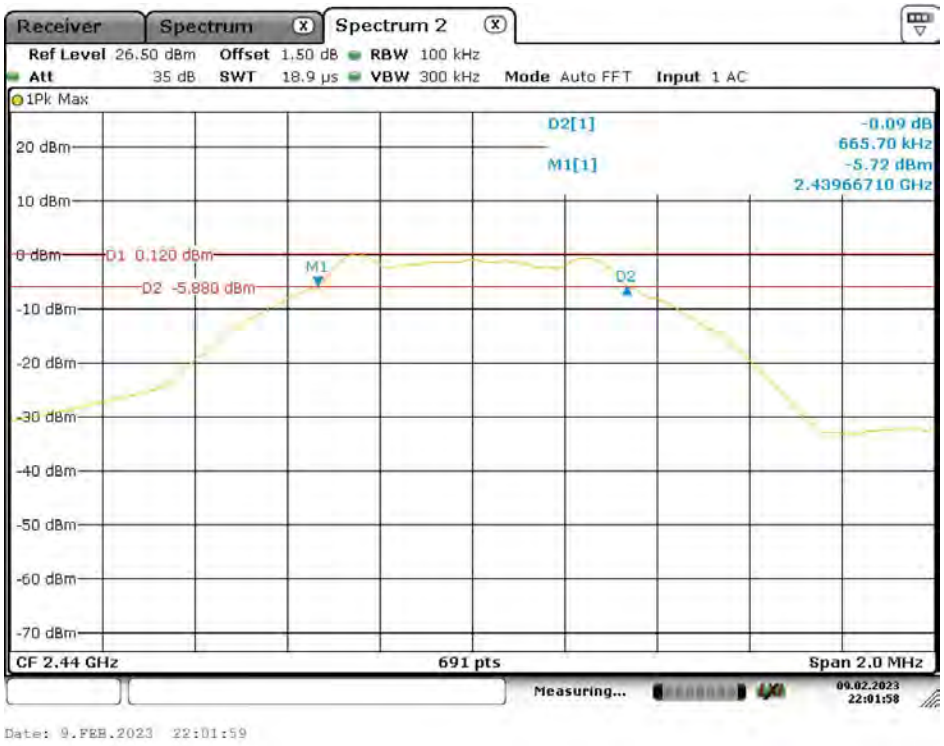
TEST RESULT

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.666	2401.667	2402.333	0.5	PASS
		2440	0.666	2439.667	2440.333	0.5	PASS
		2480	0.663	2479.667	2480.330	0.5	PASS

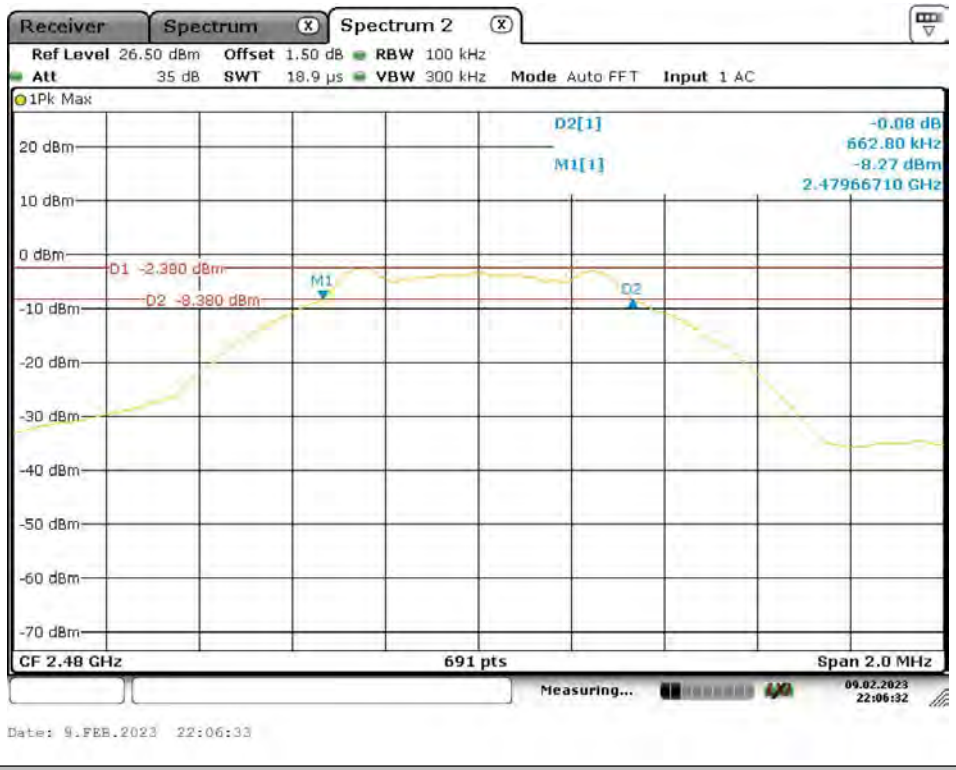
TEST GRAPHS



BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



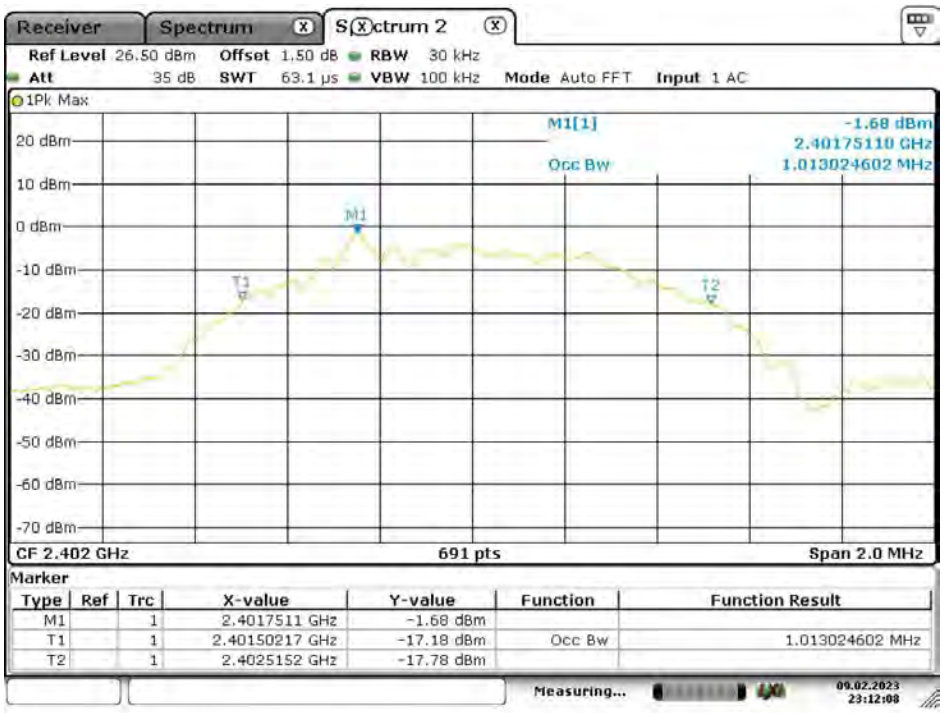
BLE_1M_Ant1_2480

OCCUPIED CHANNEL BANDWIDTH

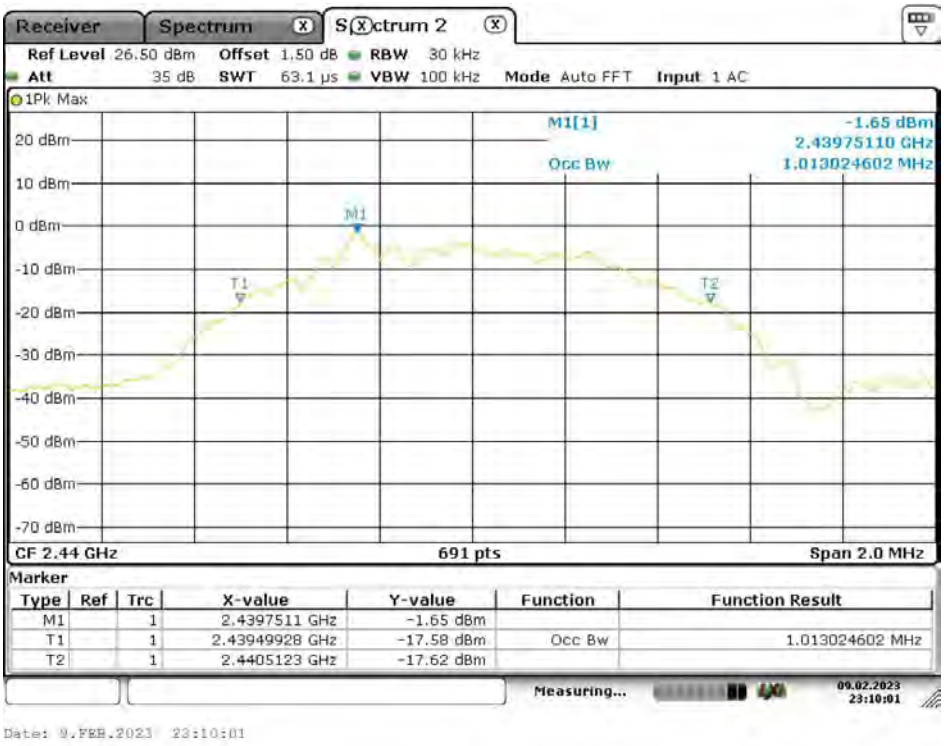
TEST RESULT

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0130	2401.502	2402.515	---	PASS
		2440	1.0130	2439.499	2440.512	---	PASS
		2480	1.0130	2479.499	2480.512	---	PASS

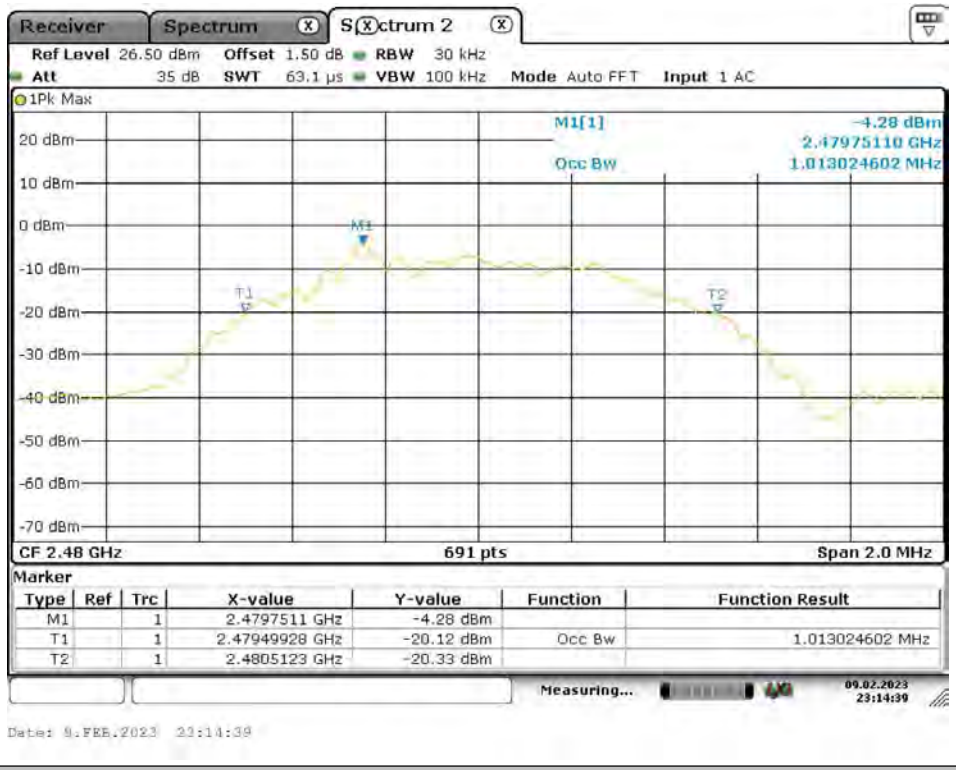
TEST GRAPHS



BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

MAXIMUM CONDUCTED OUTPUT POWER

TEST RESULT PEAK

TestMode	Antenna	Channel	Peak Powert[dBm]	Peak Powert[mw]	Conducted Limit[dBm]	Verdict	Power setting
1M	Ant1	2402	0.07	1.016	≤30	PASS	Defult
		2440	-0.10	0.977	≤30	PASS	Defult
		2480	-1.90	0.646	≤30	PASS	Defult

TEST RESULT AVERAGE

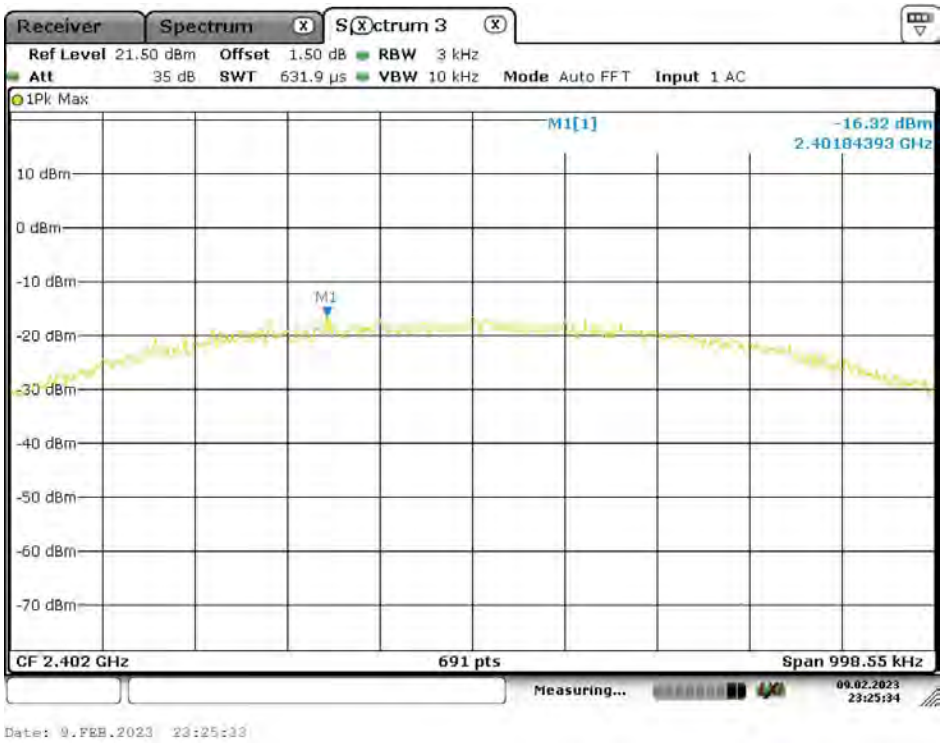
TestMode	Antenna	Channel	Average Power	Conducted Limit[dBm]	Verdict	Power setting
1M	Ant1	2402	-0.15	/	PASS	Defult
		2440	-0.55	/	PASS	Defult
		2480	-2.12	/	PASS	Defult

MAXIMUM POWER SPECTRAL DENSITY

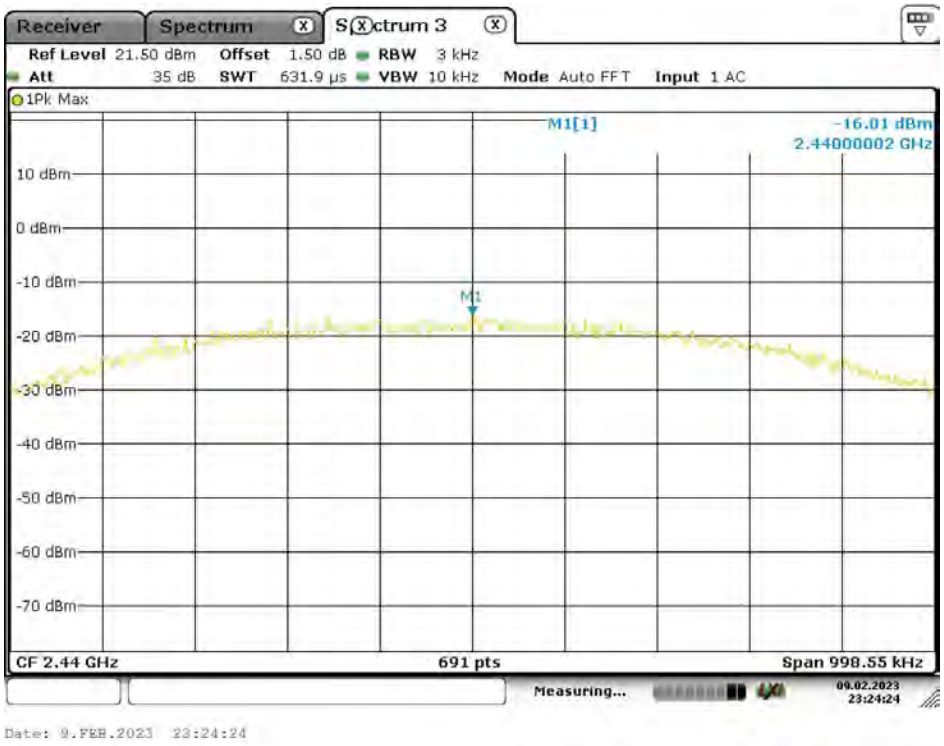
TEST RESULT

TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-16.32	≤8	PASS
		2440	-16.01	≤8	PASS
		2480	-18.35	≤8	PASS

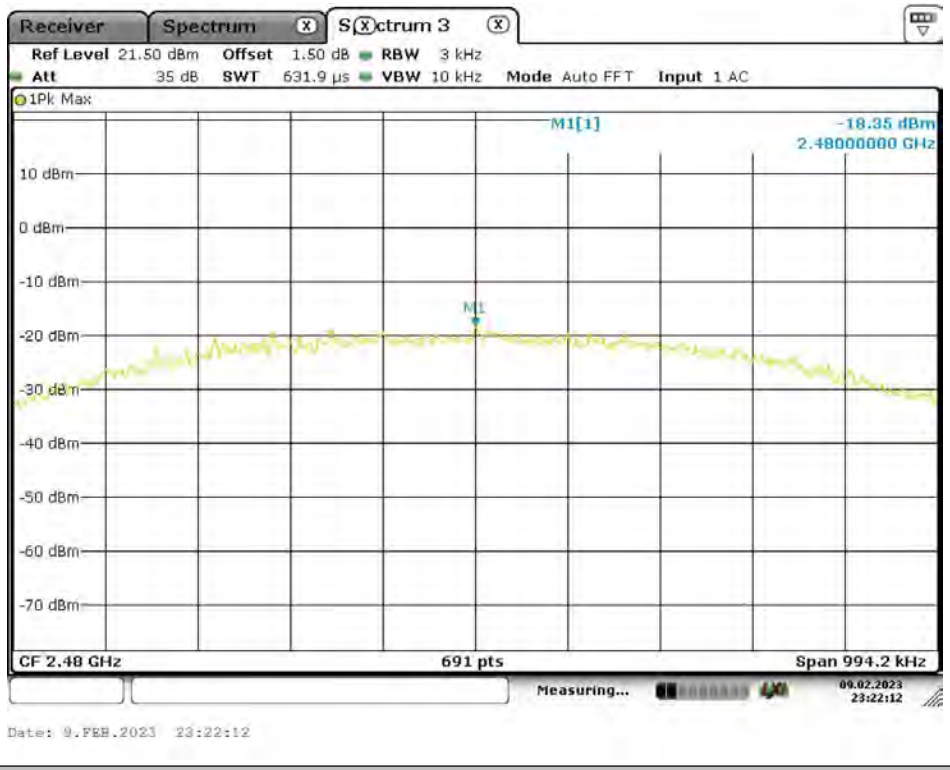
TEST GRAPHS



BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



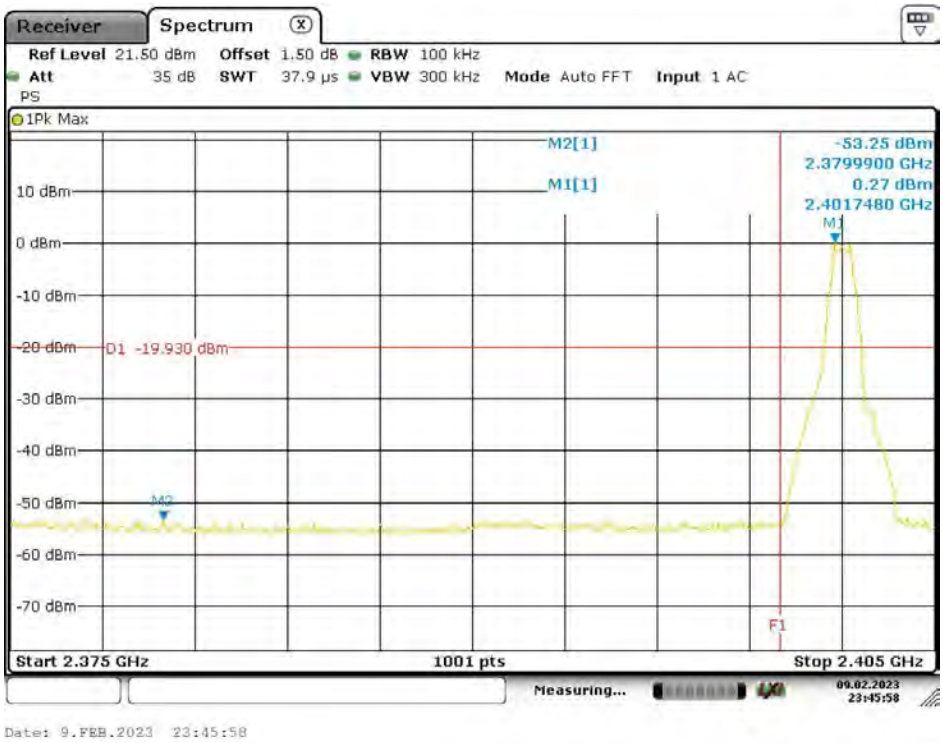
BLE_1M_Ant1_2480

BAND EDGE MEASUREMENTS

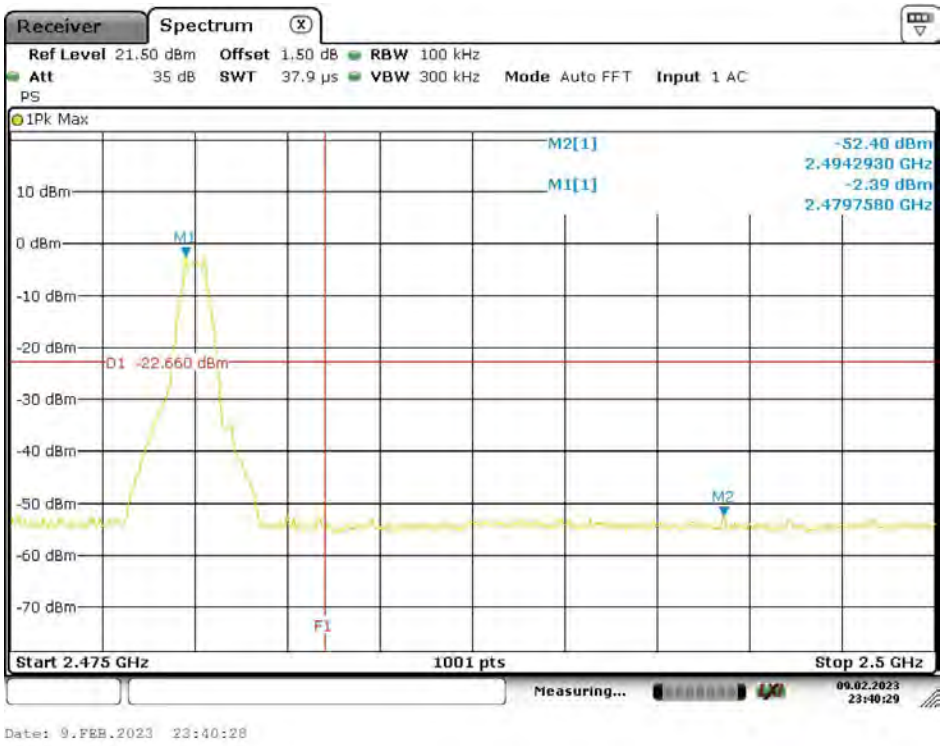
TEST RESULT

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.07	-53.25	≤-19.93	PASS
		High	2480	-2.66	-52.40	≤-22.66	PASS

TEST GRAPHS



BLE_1M_Ant1_Low_2402



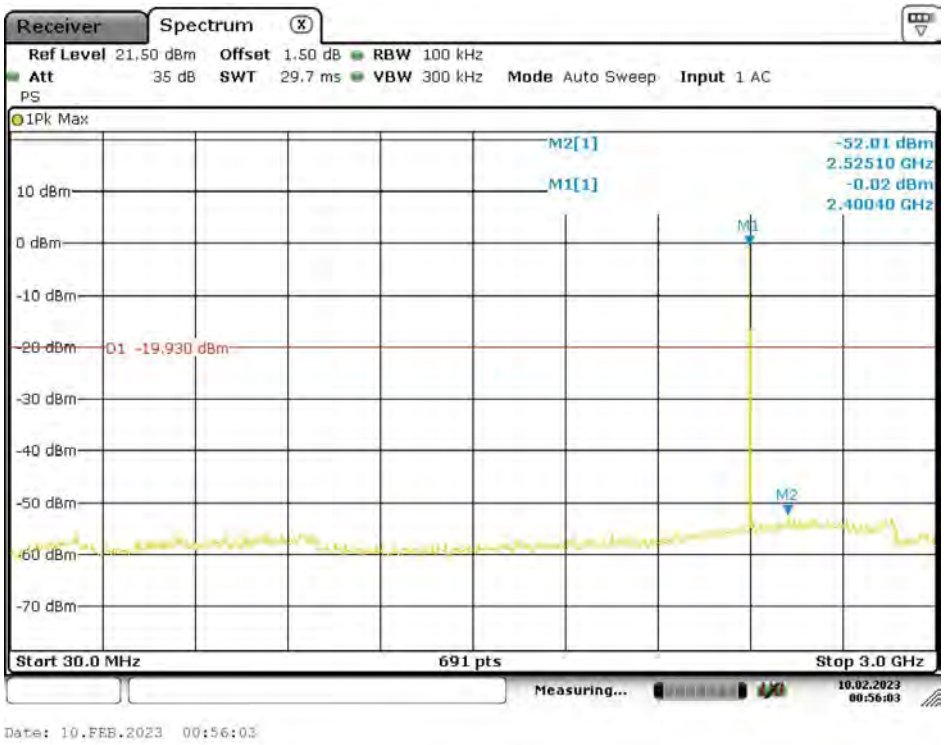
BLE_1M_Ant1_High_2480

CONDUCTED SPURIOUS EMISSION

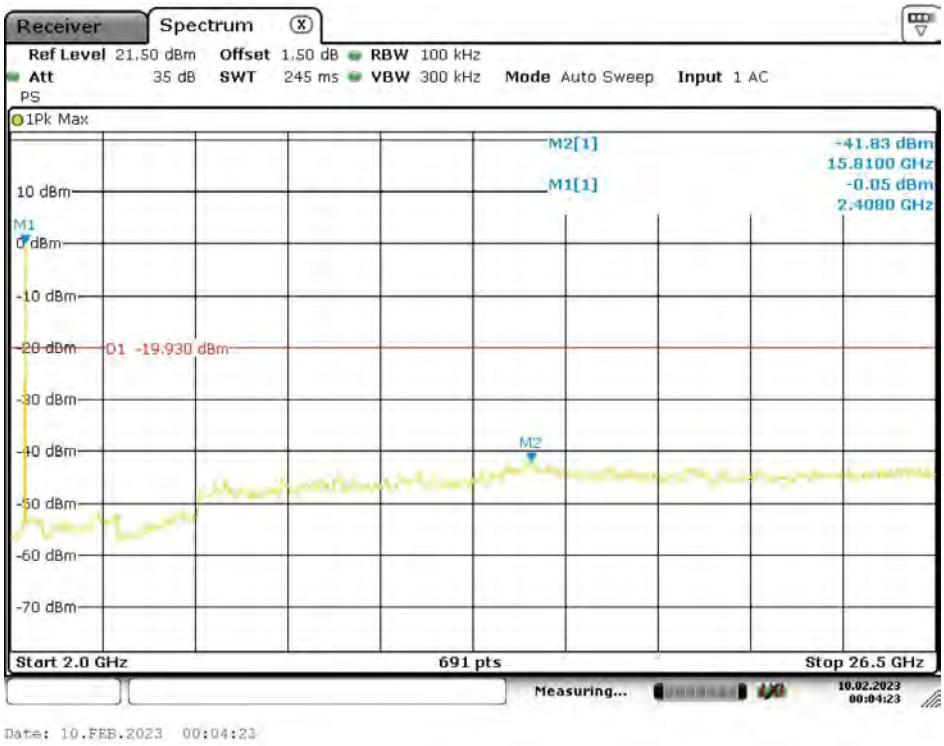
TEST RESULT

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~3000	-0.07	-52.01	≤-19.93	PASS
			2000~26500	-0.07	-41.83	≤-19.93	PASS
		2440	30~3000	0.13	-52.16	≤-19.87	PASS
			2000~26500	0.13	-41.43	≤-19.87	PASS
		2480	30~3000	-2.66	-49.29	≤-22.66	PASS
			2000~26500	-2.66	-41.76	≤-22.66	PASS

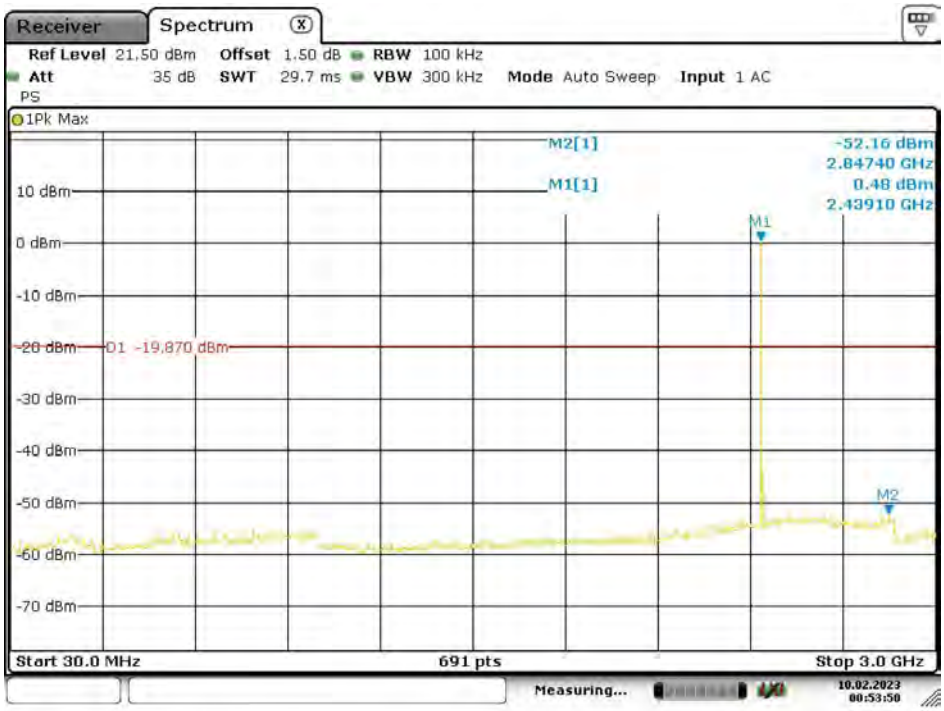
TEST GRAPHS



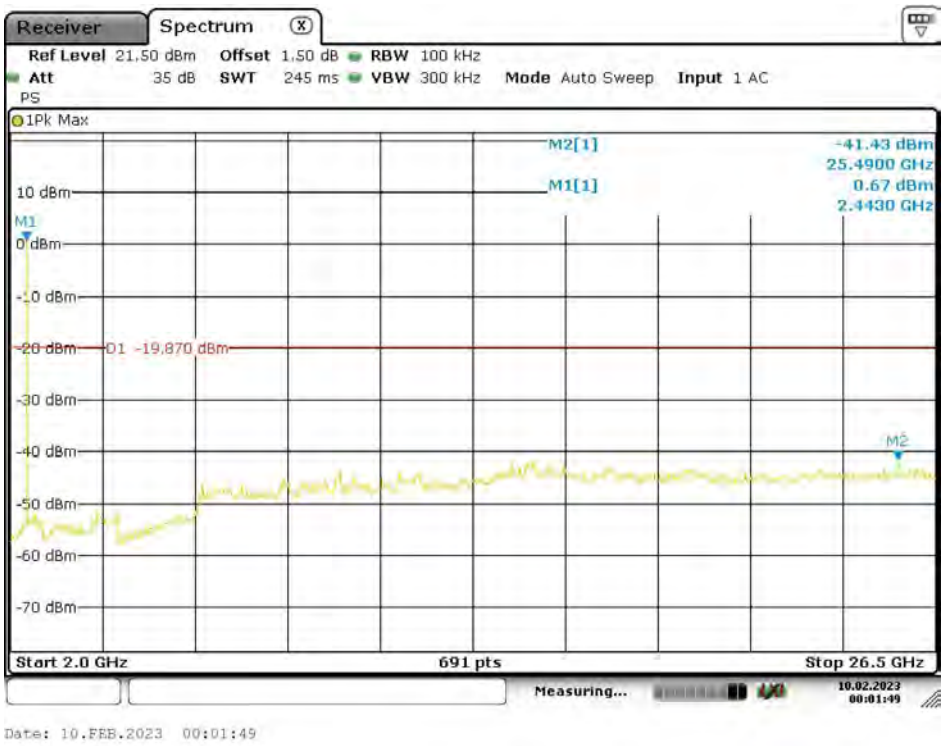
BLE_1M_Ant1_2402_30~3000



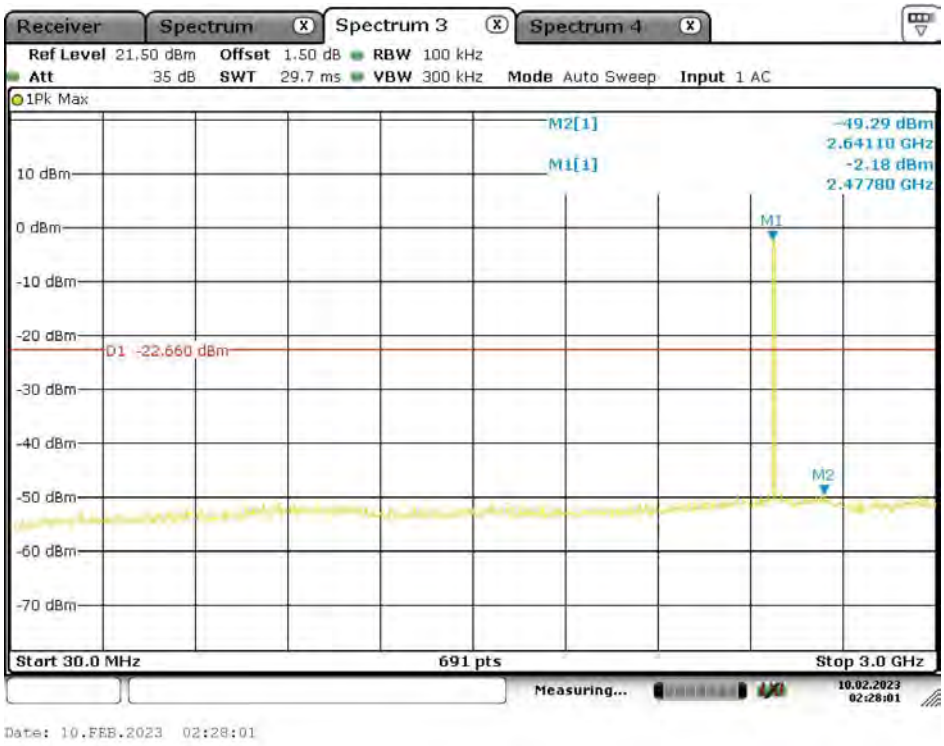
BLE_1M_Ant1_2402_2000~26500



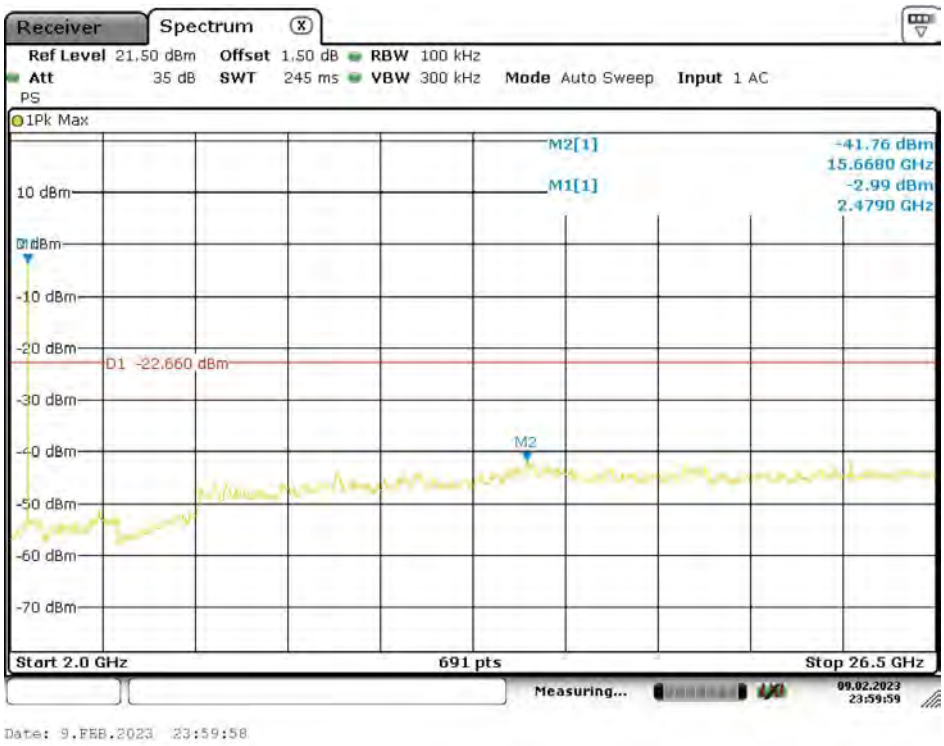
BLE_1M_Ant1_2440_30~3000



BLE_1M_Ant1_2440_2000~26500



BLE_1M_Ant1_2480_30~3000



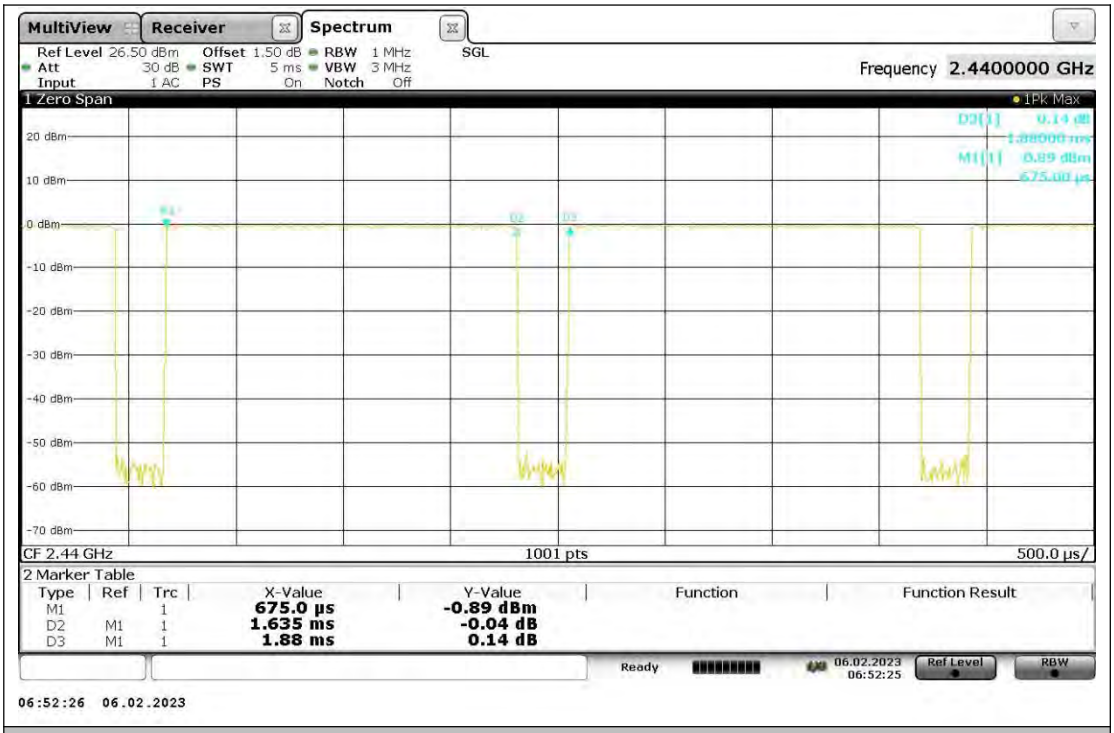
BLE_1M_Ant1_2480_2000~26500

DUTY CYCLE

TEST RESULT

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2440	1.635	1.88	0.8697	86.97	0.61	---	PASS

TEST GRAPHS



BLE_1M_Ant1_2440